REMARKS/ARGUMENTS

This case has been carefully reviewed and analyzed in view of the Official Action dated 18 August 2003. Responsive to the rejections made in the Official Action, Claims 1, 2, 3, and 10-13 have been amended to clarify the combination of elements which form the invention of the subject Patent Application. In addition to the previously canceled Claim 4, Claims 5, 6, 7, 8, 9, and 25 have been canceled by this Amendment.

In the Official Action, the Examiner rejected Claims 1 and 8 under 35 U.S.C. § 103, as being unpatentable over Hiroshi, Japanese Patent Publication JP08-278966, in view of Chiang, U.S. Patent #6,154,758. Claims 5-6 and 9 were rejected under 35 U.S.C. § 103, as being unpatentable over Hiroshi and Chiang and further in view of Paolini, U.S. Patent #6,429,793. The Examiner rejected Claims 7, 10-13, and 25 under 35 U.S.C. § 103, as being unpatentable over Hiroshi and Chiang, in view of Kraft, U.S. Patent #6,309,305. Claim 2 was rejected under 35 U.S.C. § 103, as being unpatentable over Hiroshi and Chiang in view of Krause, et al., U.S. Patent #6,154,757. The Examiner rejected Claim 24 under 35 U.S.C. § 103, as being unpatentable over Hiroshi, Chiang, and Krause, et al., and further in view of Kraft, and rejected Claims 3 and 14-23 under 35 U.S.C. § 103, as being unpatentable over Hiroshi and Chiang, in view of Hsu, et al., U.S. Patent #6,320,519.

Before discussing the prior art relied upon by the Examiner, it is believed beneficial to first briefly review the structure of the invention of the subject Patent

Application, as now claimed. The invention of the subject Patent Application is directed to an auxiliary device for editing documents. The auxiliary device includes a computer keyboard having an internal circuit with a single-chip microprocessor. The device further includes a modular key set with a document editing function. The modular key set is arranged on the computer keyboard and connected to an I/O bus of the single-chip microprocessor. The single-chip microprocessor generates a predetermined pseudo composite-key code responsive to an individual key in the modular key set being pressed by a user. By that arrangement, the user can directly edit a document by using the modular key set provided on the computer keyboard without chording. The modular key set includes a cut key, a paste key, a copy key, and a mark key, the mark key functioning to identify a segment of a document to be copied or cut. The mark key allows the document to be edited without the need for a mouse and its associated select button.

Another feature of the invention, as defined in Claim 3, is the extra adding switch key which provides an alternate function for the standard function keys of the keyboard. The extra adding switch key is connected to the I/O bus of the single-chip microprocessor and controls the functions of the function keys to operate in one of a standard function key mode or an augmentation mode. The augmentation mode defines editing functions including redo, undo, open, new, bold, save, find, forward, and send. Still further, it is believed that the specific composite-key codes associated with various keys of the modular key set, as defined in Claims 10-24, are unique and unobvious.

It is respectfully submitted that the Hiroshi reference is directed to a document editing device that includes a deletion key 5, a duplicate (copy) key 6, and a navigation (cut) key 7. However, nowhere does the reference disclose or suggest the inclusion of a mark key to permit identification of a particular segment of a document to be copied or cut, as provided in the invention of the subject Patent Application. Still further, nowhere does the reference disclose or suggest the provision of an additional key switch for switching the mode of function keys from a standard function key mode to an augmentation mode wherein additional editing functions are defined by the function keys. Still further, the reference fails to disclose or suggest the specific pseudo composite-key codes of Claims 10-24.

The Chiang reference fails to overcome the deficiencies of Hiroshi. The Chiang reference is directed to a test conversion method for computer systems. Text, input as handwriting in a pen-based computer, is converted to typeface text of a first text domain (character set), and then upon receipt of a conversion command, converts the text from the first text domain to a second text domain (character set). Nowhere does the reference disclose or suggest generating pseudo composite-key codes, which are codes representing the simultaneous and/or sequential operation of multiple keys, such being output responsive to the operation of a single key. Still further, the reference neither discloses nor suggests a key set which includes a cut key, a paste key, a copy key, and a mark key, where the mark key functions to identify a segment of a document to be copied or cut.

Therefore, the combination of Hiroshi and Chiang cannot make obvious the invention of the subject Patent Application, as now claimed.

The Paolini reference fails to overcome the deficiencies of Hiroshi combined with Chiang. The Paolini reference is directed to a system and method for translating keyboard scan codes from a variety of different functional keyboards and devices into target virtual key codes which may be utilized by a target processing host system. Nowhere does the reference disclose or suggest a modular key set which includes a cut key, a paste key, a copy key, and a mark key, the mark key functioning to identify a segment of a document to be copied or cut. Still further, the reference fails to disclose or suggest the inclusion of an extra adding switch key connected to the I/O bus of a single-chip microprocessor and controlling functions of the function keys to operate in one of a standard function key mode or an augmentation mode, the augmentation mode defining editing functions including redo, undo, open, new, bold, save, find, forward, and send. Therefore, the combination of Hiroshi, Chiang, and Paolini cannot make obvious the invention of the subject Patent Application, as now claimed.

The Kraft reference is directed to a portable telephone having copy and paste operations. The phone 1 includes a pair of soft keys 8 having the functionality of "copy" and "paste". A message that is displayed on the display 27 can be copied utilizing the soft key 8, which thereby selects the full message, which message may be subsequently pasted from one data base to another, Lines 56-61. Thus, here too, the reference fails to

disclose or suggest a modular key set having a mark key, the mark key functioning to identify a segment of a document to be copied or cut. The Kraft system provides no means for identifying a segment of the message for copying, but requires selection of the "full message". Still further, the reference fails to disclose or suggest an extra adding switch key, where the extra adding key switch is connected to an I/O bus of a single-chip microprocessor and controls functions of function keys to operate in one of a standard function key mode or an augmentation key mode, wherein the augmentation key mode defines editing functions including redo, undo, open, new, bold, save, find, forward, and send. Therefore, the combination of Hiroshi, Chiang and Kraft cannot make obvious the invention of the subject Patent Application, as now claimed.

It is not believed that the Krause, et al. or Hsu, et al. references disclose or suggest a modular key set which includes a mark key, the mark key functioning to identify a segment of a document to be copied or cut. Thus, in the invention of the subject Patent Application, a document may be edited without the need for a mouse. As neither Krause, et al. nor Hsu, et al. disclose or suggest such a combination, their combination with Hiroshi and Chiang cannot make obvious the invention of the subject Patent Application, as now claimed.

For all the foregoing reasons, it is now believed that the subject Patent Application has been placed in condition for allowance, and such action is respectfully requested.

Respectfully submitted,

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